

EXPEDITED PROCEDURE - EXAMINING GROUP 2815

PATENT

Jenemille 2/3/03

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Leonard Forbes et al.

Examiner: Jerome Jackson, Jr.

Serial No .:

09/584,566

Group Art Unit: 2815

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Title:

HORIZONTAL MEMORY DEVICES WITH VERTICAL GATES

AMENDMENT & RESPONSE UNDER 37 C.F.R. § 1.116

Box AF Commissioner for Patents Washington, D.C. 20231

In response to the Final Office Action mailed October 16, 2002, please amend the application as follows:

IN THE CLAIMS

Please substitute the claim set in the appendix entitled Clean Version of Pending Claims for the previous pending claim set. The substitute claim set is intended to reflect amendment of previously pending claims 1, 7, and 14. The specific amendments to individual claims are detailed in the following marked up set of claims.

- 1. (Amended) A memory cell, comprising:
 - a source region in a horizontal substrate;
 - a drain region in the horizontal substrate;
 - a channel region separating the source and the drain regions;

an edge-defined vertical floating gate located above a portion of the channel region and separated from the channel region by a first thickness insulator material;

at least one edge-defined vertical control gate located above another portion of the channel region and separated therefrom by a second thickness insulator material, wherein the at least one vertical control gate is parallel to and opposing the vertical floating gate, and wherein the at least one vertical control gate is separated from the vertical floating gate by an intergate dielectric; and